|   |  |          |          |               |          |              |             |         |          |          |       |              |          |          | 10/813,501 |          |             |              |                      |                   |       |        |            | BALL ET AL.     |          |           |          |        |          |                 |          |   |
|---|--|----------|----------|---------------|----------|--------------|-------------|---------|----------|----------|-------|--------------|----------|----------|------------|----------|-------------|--------------|----------------------|-------------------|-------|--------|------------|-----------------|----------|-----------|----------|--------|----------|-----------------|----------|---|
|   |  |          |          |               |          |              |             |         |          |          | Ш     |              |          |          |            | Examiner |             |              |                      |                   |       |        |            |                 | Art Unit |           |          |        |          |                 |          |   |
|   |  |          |          |               |          | - DEI        | <b>1111</b> |         |          | 1 1121   | 184   |              |          |          | C          | Quan Tra |             |              |                      |                   |       |        |            |                 |          |           |          |        |          |                 |          |   |
|   | √ Rejected _ (Through nun<br>Cancelle            |          |          |               |          |              |             |         |          |          |       | rume<br>iled | ral) N   |          |            |          | Non-Elected |              |                      |                   | A     | Appeal |            |                 |          |           |          |        |          |                 |          |   |
|   | =  |          |          | A             | llov     | wed          |             |         | ÷        |          |       | Restricted   |          |          |            |          |             | ١            | Inte                 | erfe              | rer   | nce    |            | 0               | Objected |           |          |        |          |                 |          |   |
|   | Cla  | aim      |          | Date          |          |              |             | e       |          |          | Claim |              |          |          |            | -<br>ate |             | Cla          |                      |                   | aim . | l      | Date       |                 |          |           |          | $\neg$ |          |                 |          |   |
|   |  | la l     | 25       |               |          |              |             |         |          |          |       |              | a        |          |            |          |             |              |                      | T                 |       | _      | a          |                 |          |           |          |        | Γ        |                 |          | ! |
|   | Final  | Original | 7/28/05  |               |          |              |             |         |          |          |       | Final        | Original |          |            |          |             |              |                      |                   |       | Final  | Original   |                 |          |           |          |        |          |                 |          |   |
|   |  | 1        | ٧        |               | $\Box$   | 1            | 1           | 1       | I        |          |       |              | 51.      |          | $\bot$     |          | $\Box$      | $\downarrow$ | 上                    |                   |       |        | 101        |                 | コ        | 丁         |          |        |          |                 |          |   |
|   | <u> </u>   | 3        | < <      | $\dashv$      |          | +            | +           | +       | ╁        | ╁        |       | <u> </u>     | 52<br>53 | $\vdash$ | ╄          | $\vdash$ | $\dashv$    | +            | +                    | $\dashv$          |       |        | 102<br>103 | $\vdash \vdash$ | 4        | $\dashv$  | 4        |        | L        | L               |          |   |
|   | <b></b>  | 4        | v        |               | $\dashv$ | $\dagger$    | +           | +-      | t        | +        |       | -            | 54       | $\vdash$ | +          | H        | 寸           | +            | +                    | Н                 |       |        | 103        | $\vdash$        | $\dashv$ | $\dashv$  | ╁        | +      | -        | -               | _        |   |
|   |  | 5        | ٧        |               |          | 1            | 工           |         |          |          |       |              | 55       |          |            |          |             | 土            |                      |                   |       |        | 105        |                 | 7        | 寸         | $\top$   |        |          |                 |          |   |
|   |  | 6        | V<br>V   | $\dashv$      | $\dashv$ | $\downarrow$ | 4           | _       | $\perp$  | <u> </u> |       | <u> </u>     | 56       | $\perp$  | $\perp$    |          | $\dashv$    | 4            | 1                    | Ш                 |       |        | 106        |                 | 4        | $\Box$    | $\Box$   | T      |          |                 |          |   |
|   |  | 8        | V<br>V   | $\rightarrow$ | -        | +            | +           | +       | ╁        | ┼        |       |              | 57<br>58 | ┝╌├╴     | +          | $\vdash$ | -+          | +            | ╁                    | +                 |       |        | 107<br>108 | $\vdash$        | 4        | 4         | -        | +      | ├-       |                 |          |   |
|   |  | 9        | v        |               | +        | +            | 十           | +       | +        | $\vdash$ | l     | -            | 59       |          | ╁          | $\dashv$ | $\dashv$    | +            | +                    | Н                 |       |        | 109        | H               | +        | +         | +        | ╫      | $\vdash$ |                 | $\dashv$ |   |
|   |  | 10       | ٧        |               |          |              |             |         |          |          |       |              | 60       |          |            |          |             |              |                      |                   |       |        | 110        |                 | 7        | T         | 十        | $\top$ | 1        |                 | 一        |   |
|   | <u> </u>   | 11       | ٧        |               | 4        | 4            | 4           | $\bot$  | ╄        | -        |       |              | 61       |          |            | $\Box$   | _           | _            | $\perp$              | Ц                 |       |        | 111        |                 | $\Box$   | $\Box$    |          |        |          |                 |          |   |
|   | <del>                                     </del> | 12<br>13 | V<br>V   |               | $\dashv$ | +            | -           | ┿       | ╁        | ╁╌       | ł     | -            | 62<br>63 | -        | +-         | $\dashv$ | $\dashv$    | -            | _                    | $\dashv$          |       |        | 112        | Н               | 4        | +         |          | +      | ├_       |                 | ᆜ        |   |
|   |  | 14       | v        | $\dashv$      | _        | +            | +           | +       | +        | $\vdash$ |       | -            | 64       | $\vdash$ | +          | $\dashv$ | $\dashv$    | +            | +                    | +                 |       |        | 113<br>114 | $\vdash$        | ╅        | $\dashv$  | +        | ╫      | ╁        | $\vdash$        | ⊣        |   |
|   |  | 15       | ٧        |               |          |              |             |         |          |          |       |              | 65       |          |            |          |             |              |                      | $\Box$            |       |        | 115        | H               | +        | $\forall$ | $\dashv$ | +      |          | -               |          |   |
|   |  | 16       | <b>V</b> | $\dashv$      | _        | 4            | $\bot$      | _       | 1        | ┞        |       |              | 66       |          | Ш          |          | $\perp$     |              |                      | П                 |       |        | 116        |                 | $\Box$   | $\Box$    |          |        |          |                 |          |   |
|   | —  | 17<br>18 | ۷<br>۷   | -             | +        | +            | +           | +       | +-       | ⊢        | ł     |              | 67<br>68 |          | -          | $\dashv$ | +           | $\dashv$     | +                    | $\dashv$          |       |        | 117        | $\sqcup$        | +        | -         | +        | +      | ┡        |                 |          |   |
| • |  | 19       | V        | _             | $\dashv$ | $\dagger$    | $\dashv$    | +       | +        | ╁        | l     | -            | 69       |          | $\vdash$   | $\dashv$ | $\dashv$    | $\dashv$     | +-                   | H                 |       |        | 118<br>119 | $\vdash$        | $\dashv$ | +         | +        | +      | $\vdash$ | -               | -        |   |
|   |  | 20       | V        |               |          |              |             |         | I        |          |       |              | 70       |          |            |          |             | 1            | 1-                   | $\vdash$          |       |        | 120        | H               | $\dashv$ | +         | +        | $\top$ |          | -               |          |   |
|   |  | 21       |          | _             | 1        | 4            | _           | 4       | ↓        |          |       | <u> </u>     | 71       |          | $\Box$     | _        | $\Box$      |              | $\perp$              | $\square$         |       |        | 121        | П               | $\perp$  |           |          |        |          |                 |          |   |
|   | <u> </u>   | 22<br>23 |          | -             | +        | +            | +           | +       | ╀        | ┾-       |       |              | 72<br>73 |          | $\vdash$   | 4        | $\dashv$    | +            | +                    | $\sqcup$          |       |        | 122        | $\vdash$        | 4        | +         | +        | $\bot$ | <u> </u> | Ш               |          |   |
|   |  | 24       | $\vdash$ | $\dashv$      | $\dashv$ | $^{+}$       | +           | ╁╴      | t        | $\vdash$ |       | <del> </del> | 74       | +        | +          | $\dashv$ | $\dashv$    | +            | +                    | $\vdash$          |       |        | 123<br>124 | $\vdash$        | +        | +         | +        | +      | ┢        | $\vdash$        |          |   |
|   |  | 25       |          | 1             |          | 1            |             |         |          |          |       |              | 75       |          | 1          | $\dashv$ | $\dashv$    | 1            | ╁┈                   | † †               |       |        | 125        |                 | $\dashv$ | $\top$    | +        | +      | $\vdash$ | Н               | ㅓ        |   |
|   |  | 26       |          | _             | 4        |              | _           | 4       | L        |          |       |              | 76       |          |            |          | $\Box$      |              |                      |                   |       |        | 126        |                 |          | $\perp$   |          |        |          | $\overline{}$   |          |   |
|   |  | 27<br>28 | $\vdash$ | -             | +        | +            | -           | +       | ╀        | <u> </u> |       | <u> </u>     | 77<br>78 |          | $\vdash$   | -        | $\dashv$    | +            | -                    | $\sqcup$          |       |        | 127        | $\sqcup$        | 4        | 4         | $\bot$   |        | _        |                 | _        |   |
|   | <u> </u>   | 29       | $\vdash$ | - †           | +        | +            | +           | +       | ╁        |          |       | <u> </u>     | 79       | $\vdash$ | +          | $\dashv$ | $\dashv$    | +            | +                    | ┼┤                |       |        | 128<br>129 | -               | +        | +         | +        | +-     | ⊢        |                 | _        |   |
|   |  | 30       |          |               |          | 1            |             |         |          |          |       |              | 80       |          |            |          | _           | _            | +-                   | $\forall$         |       |        | 130        | $\vdash$        | +        | +         | +        | +      | +        | H               | $\dashv$ |   |
|   |  | 31       |          | $\dashv$      | $\bot$   | $\downarrow$ | $\perp$     | $\perp$ |          |          |       |              | 81       |          | $\Box$     | $\Box$   | $\Box$      | $\perp$      |                      | Ш                 |       |        | 131        |                 |          |           |          |        |          |                 |          |   |
|   | <del></del>                                      | 32<br>33 |          | $\dashv$      | $\dashv$ | +            | +           | +-      | H        | ├        |       | <b> </b>     | 82<br>83 |          | +          | $\dashv$ | +           | -            |                      | $\dashv$          |       |        | 132        | 1               | 4        | 1         | $\perp$  | $\bot$ | <u> </u> |                 | $\Box$   |   |
|   |  | 34       | $\dashv$ | $\dashv$      | $\dashv$ | +            | +           | +       | +        | $\vdash$ |       | <b>—</b>     | 84       |          | $\vdash$   | $\dashv$ | +           | +            | +                    | $\dashv$          |       |        | 133<br>134 | $\vdash \vdash$ | +        | +         | +        | +      | $\vdash$ | Н               | $\dashv$ |   |
|   |  | 35       |          |               |          |              | 上           |         |          |          |       |              | 85       |          |            | 士        | _†          | 十            | $\top$               | $\dagger \exists$ |       |        | 135        | $\vdash$        | $\dashv$ | +         | +        | +      | $\vdash$ | $\dashv$        | $\dashv$ |   |
|   |  | 36       |          |               |          |              | $\perp$     | $\perp$ |          |          |       |              | 86       |          |            |          |             |              | I                    |                   |       |        | 136        |                 |          |           |          |        |          |                 |          |   |
| • |  | 37<br>38 | $\dashv$ | $\dashv$      | +        | +            | +           | ╬       | +-       | -        |       | <b> </b>     | 87       |          | $\vdash$   | $\dashv$ | 4           | +            | +                    | Н                 |       |        | 137        | $\Box$          | 4        | _[        | $\perp$  | 1      |          |                 | $\Box$   |   |
|   | $\vdash \vdash$                                  | 39       | $\dashv$ | +             | +        | +            | +           | +-      | $\vdash$ | $\vdash$ |       | -            | 88<br>89 | -        | +          | $\dashv$ | $\dashv$    | +            | +                    | $\vdash$          |       |        | 138<br>139 | $\vdash$        | +        | +         | +        | +      | -        | $\vdash$        |          |   |
|   |  | 40       |          |               | 士        | ightharpoons |             |         |          |          |       |              | 90       |          |            |          | 士           | 丁            | 1-                   | $\Box$            |       |        | 140        |                 | +        | +         | +        | +      |          | H               | $\dashv$ |   |
|   |  | 41       | _[       | 4             | _        | 4            | 1           | $\perp$ | F        | oxdot    |       |              | 91       |          | П          | $\Box$   | 1           | I            | $\perp$              | $\Box$            |       |        | 141        | $\Box$          | $\perp$  | 1         | $\perp$  | $\bot$ |          |                 |          |   |
|   |  | 42<br>43 | $\dashv$ | +             | +        | +            | +           | +-      | ├        | _        |       |              | 92<br>93 | -        | $\dashv$   |          | +           | +            | -                    | $\vdash$          |       |        | 142        | 4               | +        | 4         | $\perp$  | _      | <u> </u> |                 | _]       |   |
|   |  | 44       | +        | $\dashv$      | +        | +            | +           | +       | $\vdash$ | $\vdash$ |       | $\vdash$     | 94       | +        | +          | +        | ╁           | +            | +                    | +                 | ⊪∤    |        | 143<br>144 | +               | +        | +         | +        | +      | $\vdash$ | $\vdash \vdash$ | $\dashv$ |   |
|   |  | 45       |          | $\Box$        | $\perp$  | 1            |             | $\perp$ |          |          |       |              | 95       |          |            | 士        | 士           |              | 1                    |                   |       |        | 145        |                 | $\top$   | $\dagger$ | +        | +      | -        | $\vdash$        | $\dashv$ |   |
|   |  | 46       | 4        | $\dashv$      | $\dashv$ | 1            | 1           | 1       | <u> </u> | Ц        |       | <u> </u>     | 96       |          | $\Box$     | $\bot$   |             | Ţ            | $oldsymbol{\square}$ |                   |       |        | 146        | $\Box$          | I        |           | $\perp$  |        |          |                 |          |   |
|   |  | 47<br>48 | $\dashv$ | $\dashv$      | +        | +            | +           | -       | ⊢        | Н        |       | <b>—</b>     | 97<br>98 | +        | $\vdash$   | +        | +           | - -          | +                    | $\sqcup$          | ŀ     |        | 147        | 4               | 4        | 4         | $\perp$  | +      | Щ        | Ц               | _]       |   |
|   |  | 75       |          | -+            |          | +            |             | +       | ₩        | $\vdash$ |       |              | 30       |          | 4          | $\perp$  | L           |              | _1_                  | السا              | ::::L |        | 148        |                 |          | . 1       | 1        | 1      | 1        | ١. ا            | - 1      |   |

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Application/Control No.

Index of Claims

Applicant(s)/Patent under Reexamination

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